

**Finding of No Significant Impact**  
**Fire Management Plan**  
**Pictured Rocks National Lakeshore, Michigan**  
**October 2005**

**Background**

Pictured Rocks National Lakeshore was established October 15, 1966, by Public Law 89-668 to “preserve for the benefit, inspiration, education, recreational use, and enjoyment of the public, a significant portion of the diminishing shoreline of the United States and its related geographic and scientific features.” The national lakeshore currently encompasses 73,235 acres. The shoreline zone (33,929 acres, all in federal ownership except for 10 acres) is to be managed to preserve its scenery and outstanding natural features. The enabling legislation also established an inland buffer zone within the national lakeshore. The inland buffer zone (39,306 acres that area a mixture of private and governmental ownership) was established by Public Law 89-668 to “stabilize and protect the existing character and uses of the lands, waters, and other properties within such zone for the purpose of preserving the setting of the shoreline and lakes, protecting its watershed and streams, and providing for the fullest economic utilization of the renewable resources through sustained yield timber management and other resource management compatible with the purposes of the Act.”

The General Management Plan (GMP) for the lakeshore indicates that the lakeshore is significant because it preserves and affords public access to a spectacular and diverse segment of the Lake Superior shoreline. The mission of Pictured Rocks National Lakeshore is to conserve the ecosystem integrity of the national lakeshore, a mosaic of geologic, biologic, scenic, and historic features, offering opportunities for recreation, education, inspiration, and enjoyment forever.

The National Park Service (NPS) Director’s Order 18, *Wildland Fire Management*, requires that all NPS units with vegetation that can sustain fire must have a Fire Management Plan (FMP). It further states that, “The overall resource management objectives for an NPS unit must guide Fire Management Plans. The resource management objectives will determine whether and how fire will be managed.” To ensure that the protocols described in the FMP would address effects on natural and cultural resources, Director’s Order 18 requires that the FMP be compliant with the National Environment Policy Act. The NPS has prepared a FMP and environmental assessment (EA) that provides an analysis of several alternatives for fire management at the lakeshore. They include the no action alternative and alternatives that would use prescribed fire and/or mechanical treatment to achieve desired natural resource conditions and reducing hazard fuels to protect park resources and surrounding property from the effects of wildfire.

Internal, agency, and public scoping was conducted before the formal analysis began. Concerns identified during scoping and addressed in the EA and FMP include the potential to use prescribed fire for ecological restoration and maintenance of natural systems; the potential threat for fire escaping to surrounding state, corporate and private lands; the effects of fire and fire suppression activities on rare plant communities and wildlife; fire and suppression impacts on

cultural, ethnographic, archeological, and historic resources; potentially increased fuel loads resulting from logging in the inland buffer zone; and potential impacts to air quality from prescribed fire.

### **Selected Alternative**

The fire management alternative selected for implementation at the lakeshore is Alternative B (Preferred Alternative), which is described in detail in the EA. This alternative will use an integrated program of prescribed fire and mechanical treatment to meet resource management objectives and reduce hazard fire accumulations at the lakeshore. The integrated program will allow the maximum opportunity and flexibility to restore fire-adapted communities, protect natural and cultural resources, and reduce the build up of hazard fuels.

The NPS and cooperators will suppress all unplanned fire at the lakeshore as soon as possible, regardless of whether the fire is caused by lightning or human activities. Fire fighting techniques, methods, and tactics used will follow Minimum Impact Suppression Tactics Guidelines. All prescribed fires will be carefully planned and implemented in accordance with a written prescribed fire plan. Prescribed fires will be conducted under the direction and operational control of a fully qualified Prescribed Fire Burn Boss. All other positions needed to conduct and hold the prescribed fire will be filled with fully qualified resources. All resources listed in any project prescribed fire plan will be available for the duration of the fire. If any resource identified in the prescribed fire plan cannot be available for the duration of the fire, that fire will be postponed.

Operational guidelines, range of acceptable fire behavior, and favorable weather conditions to implement the prescribed fire will be specified in each prescribed fire plan. Each project will include monitoring and evaluation criteria as an integral component of the plan and will be implemented continuously during the prescribed fire operation to ensure that fire behavior and weather conditions remain within the prescribed fire plan parameters.

Current and expected weather conditions, fuel loading and fuel moisture and their associated fire dangers will be monitored closely to determine if and when prescription criteria are met. A current spot weather forecast will be obtained on the planned day of ignition, and all prescription elements will be verified to ensure all conditions and parameters were within desired ranges. If all criteria are met, and the "go - no go" checklist indicates that the prescribed fire is acceptable and within prescribed parameters, a test fire will be ignited to determine on-site fire behavior. If the test burn indicates fire activity and resource benefits consistent with the plan, the project will continue. If not, the test burn will be suppressed and the project postponed until more favorable conditions are present.

All application of fire will be through hand ignition techniques, usually by drip torch. Light hand ignition methods and sequences will be used to encourage low intensity fire behavior appropriate to the vegetation to be burned and the resource benefit objectives to be met. The NPS will ensure that sufficient fire-fighting resources are available should the weather change and fire behavior exceed expectations. Resources will include personnel, water, and support from other

entities. Equipment will be brought in on existing paved or unpaved roadways, or on foot. Hand tools and chainsaws will be used for cutting vegetation and scraping fire lines.

In some areas of the Lakeshore, fuels will be reduced through direct removal. Typically, this will entail cutting the excess fuel on the project site and removing it from the site for chipping and/or disposal. Some fuels may be chipped and left on site. Mechanical projects may include the removal of some live shrubs and smaller trees that would otherwise provide ladders for fire to move into larger tree canopies. Mechanical treatments will typically be used within 200 feet of structures, campgrounds, and day use areas and along Lakeshore boundaries to provide a fire-safe zone between developments and the surrounding wildlands. To maintain their effectiveness, mechanically treated areas that would serve as reduced fuel buffers will require re-treatment every 5-10 years in shrub and forest vegetation.

As part of planning for mechanical projects, individual sites will be assessed by qualified lakeshore staff for the presence of special status species and for significant cultural resources. Site specific recommendations for protection of sensitive resources will be incorporated into project planning and implementation, and the project will proceed if there is a determination of no adverse affect of special status species or on significant cultural resources.

The selected alternative **will apply only** to NPS fee-owned lands within the federally administered portion of the Lakeshore. It **will not apply** to private property, commercial timberland, or other public lands within the boundary unless the private landowner, commercial timberland manager, or public land manager wishes to conduct cooperative prescribed fires.

### **Other Alternatives Considered**

The no-action alternative and one other action alternative were examined in the EA. Alternative A (No Action) would have continued operations without a required Director's Order 18 compliant fire management plan at the Lakeshore. All wildland fires would be suppressed and no prescribed fire program would be implemented. The No Action Alternative was not selected because it would not help to reduce hazard fuels or restore and maintain fire-adapted natural communities at the Lakeshore. Under this alternative, fire-adapted communities would slowly disappear and hazard fuels would continue to build up.

Alternative C would be compliant with Director's Order 18, but not allow for prescribed fire use to reduce hazard fuels or restore and maintain fire-adapted communities. Mechanical fuel reduction would be allowed. Alternative C was not selected because it would not allow for an integrated program of prescribed fire and mechanical treatment to meet resource management objectives and reduce hazard fire accumulations at the lakeshore.

In addition, the alternative of allowing naturally occurring fires to burn under certain specific conditions (Wildland Fire Use) to meet resource objectives was considered, but not analyzed further. Wildland Fire Use is not acceptable at the Lakeshore because of safety, private property, and resource management considerations. Wildland Fire Use would significantly increase the potential to negatively impact public safety, property, and park resources.

## **Environmentally Preferred Alternative**

The alternative selected for implementation - Alternative B (Preferred Alternative) - is also the environmentally preferred alternative when measured against the six criteria listed in Section 101 of the National Environmental Policy Act (NEPA).

Criterion 1 (Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations) is best met by Alternative B which emphasizes:

- Maximum flexibility to choose prescribed fire, mechanical treatment, or a combination depending on the needs of the site.
- Maximum restoration and maintenance of fire-adapted communities.
- Minimal negative impacts to natural resources, cultural resources and recreational use by adoption of all avoidance and mitigation measures.

Criterion 2 (Assure for all generations safe, healthful, productive, and aesthetically and culturally pleasing surroundings) is best met by Alternative B which emphasizes:

- Maximum reduction of hazard fuels.
- Low intensity prescribed fires to increase nitrogen and soil productivity.
- Helps maintain aesthetic quality of the Lakeshore by restoring and maintaining fire-adapted communities thereby maintaining scenic and biological diversity.

Criterion 3 (Attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences) is best met by Alternative B, which emphasizes:

- Safety measures fully incorporated and implemented on each prescribed fire to protect fire personnel, the public, park facilities, and private property.
- Minimum Impact Suppression Tactics used at all times to protect natural and cultural resources.
- Minimal negative impacts to natural resources, cultural resources, and recreational use by adoption of all avoidance and mitigation measures.

Criterion 4 (Preserve important historic, cultural, and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice) is best met by Alternative B which emphasizes:

- Measures to avoid or minimize impacts to archeological sites and historic structures.
- Restoration and maintenance of fire-adapted communities, a part of our national heritage that is disappearing due to fire suppression.
- Protection of the scenic and biological diversity by restoring and maintaining fire-adapted communities within the Lakeshore.

Criterion 5 (Achieve a balance between population and resource use that will permit high standards of living and wide sharing of life's amenities) is best met by Alternative B which emphasizes:

- Reducing hazard fuels and the risk of intense wildfire which could threaten private property.
- Protection of the scenic and biological diversity by restoring and maintaining fire-adapted communities within the Lakeshore.

Criterion 6 (Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources) is best met by Alternative B which emphasizes:

- Hand ignition techniques.
- Use of hand tools and chainsaws rather than heavy equipment for cutting vegetation.
- Use of natural barriers, wetlines, or blacklines to contain prescribed fire.

### **Why the Preferred Alternative Will Not Have a Significant Effect on the Human Environment**

The intensity or severity of impacts resulting from implementation of the selected alternative was evaluated using the ten criteria listed in 40 CFR 1508.27. The results are as follows:

Criterion 1: Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.

The selected alternative will result in minor, short-term adverse impacts to air quality and water-quality. Impacts to soils, wetlands, vegetation, wildlife, and threatened and endangered species will be minor to moderate and, on the whole, beneficial. Negligible adverse impacts will occur to prehistoric archeological resources, and minor to historic archeological resources. No impact will occur to historic structures. Ethnographic resources may experience moderate, beneficial impacts by restoring ecosystem processes. Moderate, beneficial impacts will occur to scenic resources, and have moderate, beneficial impacts to recreation/visitor use. Minor, short-term impacts will occur to recreation/visitor use. However, the selected alternative will not have a significant impact on the scenic, recreation, fish, wildlife, or cultural values of Pictured Rocks National Lakeshore.

Criterion 2: The degree to which the proposed action affects public health or safety.

Extensive safety measures will be incorporated into every prescribed fire and fire suppression activity. Therefore, the impacts of the selected alternative to public health or safety will be minimal.

Criterion 3: Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

Pictured Rocks National Lakeshore is a protected area that preserves Lake Superior coastal habitats and serves as a refuge for populations of diverse flora and fauna, including federally and state-listed threatened and endangered species. The Lakeshore retains numerous archeological and historic resources that reflect centuries of human use. As described in Criterion 1, impacts to Lakeshore resources will range from negligible to moderate. The selected alternative will have no impact to coastal processes of the Lakeshore and moderate beneficial impacts to scenic resources. There will be no impact to prime farmlands.

Criterion 4: The degree to which the effects on the quality of the human environment are highly uncertain or involve unique or unknown risks.

The selected alternative is not highly controversial as evidenced from public input and agency coordination. Three emailed comments and one phone call were received from the public; three supported the preferred alternative and one supported the No Action alternative. One letter of comment was received during the public review period from the U.S. Fish and Wildlife Service providing consultation under Section 7 of the Endangered Species Act.

Criterion 5: The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

The selected alternative does not carry highly uncertain effects on the human environment or involve unique or unknown risks. The effects of prescribed fire and mechanical treatment on fire-adapted communities are well-documented. Risks to property will be reduced by reducing hazard fuel accumulation at the Lakeshore. The risk of prescribed fire will be minimized by incorporation of extensive safety measures.

Criterion 6: The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

The selected alternative will not establish a precedent for future actions with significant effects. Implementing Alternative B (Preferred Alternative) is well within the guidelines set by the General Management Plan for the Lakeshore. It will help restore and maintain scenic and biological diversity and help meet the resource management objectives outlined in the General Management Plan.

Criterion 7: Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.

The analysis identified plant communities whose long-term health and existence are dependent upon periodic fire or other treatment. Implementing Alternative B (Preferred Alternative) over the course of many years and in conjunction with prescribed fire used by other land managers on adjacent lands could have positive cumulative impacts by restoring fire-adapted communities and reducing hazard fuels in the area. This is the only cumulative effect anticipated under the adoption of the Alternative B (Preferred Alternative). However, these cumulative impacts would not be considered to be significant, particularly in comparison to the extensive loss of fire-adapted communities due to years of fire suppression.

Criterion 8: The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.

The Michigan Department of State, State Historic Preservation Office (SHPO) concurred that there would be no adverse affects on cultural resources by phone on October 13, 2005. This

satisfies the requirements of Section 106 of the National Historic Preservation Act, as amended (16 U.S.C. 470).

Criterion 9: The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

The NPS initiated informal consultation with the U.S. Fish and Wildlife Service (USFWS) on August 26, 2005. By a memorandum dated October 7, 2005, the USFWS concurred with *no effect* determinations for piping plover and piping plover critical habitat. The USFWS suggested that *no effect* determinations for Pitcher's thistle, bald eagle, gray wolf, and Canada lynx be changed to *not likely to adversely affect*. These changes were made to the EA. This satisfies the requirements of the Endangered Species Act, as amended (16 U.S.C. 1531-1543).

Criterion 10: Whether the action threatens a violation of federal, state, or local law or requirements imposed for the protection of the environment.

The selected alternative will not violate any environmental protection law or regulation.

### **Public Involvement**

The FMP and EA were made available for public review and comment during a 30-day period ending September 30, 2005. A news release announcing its availability was sent to area media outlets and all buffer zone land owners were sent notification of availability. The FMP and EA were available at Lakeshore visitor centers, on the Lakeshore website, at the Lakeshore headquarters, and by request. A public open house was held September 21, 2005, with one member of the public participating. Three emailed comments and one phone call were received from the public.

### **Agency Consultations**

The FMP and EA were sent to the U.S. Fish and Wildlife Service, Michigan Historical Society, Hiawatha National Forest, Seney National Wildlife Refuge, Michigan Department of Natural Resources, and the Chippewa/Ottawa Resource Authority. Previous drafts of these documents were also sent to these entities for early input.

As stated in response to Criterion 9 above, the USFWS concurred with *no effect* determinations for piping plover and piping plover critical habitat. The USFWS suggested that *no effect* determinations for Pitcher's thistle, bald eagle, gray wolf, and Canada lynx be changed to *not likely to adversely affect*.

As stated in response to Criterion 8 above, the Michigan SHPO concurred that no adverse effects on historic properties will occur as a result of this plan.

The NPS consulted with five potentially affected Indian tribes on the FMP and EA through the Chippewa/Ottawa Resourced Authority. No comments or concerns were received.

## **Finding of No Significant Impact and No Impairment**

Based on my review of the facts and analysis contained in the EA which is incorporated herein, I conclude that the selected alternative, Alternative B (Preferred Alternative) using prescribed fire and mechanical treatment to reduce hazard fuels and restore and maintain fire-adapted communities, will not have a significant impact either by itself or considering cumulative impacts. Accordingly, the requirements of the National Environmental Policy Act, regulations promulgated by the President's Council on Environmental Quality, and provisions of NPS Director's Order 12 and Handbook (Conservation Planning and Environmental Impact Analysis and Decision-Making) have been fulfilled.

Furthermore, Alternative B (Preferred Alternative) selected for implementation will not impair park resources or values and will not violate the NPS Organic Act. The selected alternative supports the enabling legislation establishing Pictured Rocks National Lakeshore and will help preserve for the benefit, inspiration, education, recreational use, and enjoyment of the public, a significant portion of the diminishing shoreline of the United States and its related geographic and scientific features. An environmental impact statement is not required and will not be prepared for implementation of Alternative B (Preferred Alternative).

Recommended:

James A. Northrup  
Superintendent, Pictured Rocks National Lakeshore

11/2/05  
Date

Approved:

Ernest R. [Signature]  
Regional Director, Midwest Region

11-30-05  
Date